

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A resin molding machine for molding a work with resin, comprising:

a press section having a molding die for clamping and molding the work;

a cavity plate having a cavity hole, which defines a shape and thickness of a resin mold section of the work;

means for setting the work in said press section;

means for repeatedly carrying said cavity plate into and out from said press section;

and

means for positioning said cavity plate onto the molding die; and

a vertical driving mechanism for moving said cavity plate, which has been carried into said press section by the carrying means, close to and away from a clamping face of the molding die,

wherein said vertical driving mechanism moves said cavity plate away from the clamping face of the opened molding die after molding the work, then the carrying means carries said cavity plate so as to separate and take out the molded work from the molding die.

2. (Original) The resin molding machine according to claim 1, wherein said cavity plate is a metal belt, which is circulated or reciprocally moved on a clamping face of the molding die.

3. (Original) The resin molding machine according to claim 1, wherein said cavity plate is wound on a couple of rollers, and

said cavity plate is separated away from a clamping face of the molding die and conveyed between the rollers with a prescribed pitch after the work is molded.

4. (Currently Amended) The resin molding machine according to claim 1, wherein said cavity plate ~~is cleaned before carrying into the press section~~ has a part to be cleaned, which is synchronously cleaned, on the upper stream side of the said press section in the carrying direction, with the carrying action, and

the part to be cleaned includes an air sucking section capable of sucking an upper face and a lower face of said cavity plate.

5. (Currently Amended) The resin molding machine according to claim 1, wherein said cavity plate ~~is a metal plate, which is moved on and along a circulating track, whose surface is parallel to a clamping face of the molding die~~ plate, which is piled on a supporting frame mounted on a carrying arm having a hollow section, is synchronously carried on and along a circulating track, whose surface is parallel to a clamping face of the molding die, by moving the carrying arm by a motor, with molding steps, and

the supporting frame in said press section is moved upward by a lifter so as to press said cavity plate onto an upper die, and a lower die, on which the work is mounted, is moved upward and enters the hollow section of the carrying arm and the supporting frame so as to

clamp the work and said cavity plate between the upper die and the lower die for resin molding.

6. (Currently Amended) The resin molding machine according to claim 1, wherein ~~said cavity plate is preheated before carrying into the press section~~ a lifter of a preheating section moves a supporting frame upward, together with said cavity plate, on the upper stream side of the press section in the carrying direction, so as to press said cavity plate onto a preheating die.

7. (Original) The resin molding machine according to claim 1, wherein said cavity plate is circulated via a preheating section, said press section, a degating section and a cleaning section, and

the circulation of said cavity plate is synchronized with actions performed in said sections.

8. (Original) The resin molding machine according to claim 1, wherein the work which has been molded is conveyed from said press section to a degating section, at which useless resin is separated from a molded product and they are separately collected.

9. (Original) The resin molding machine according to claim 1, wherein the molding die is a transfer molding die including a pair of dies,

a pot, a plunger and a work holding section, on which the work is mounted, are provided in one of the dies,

a cul and resin paths including a runner and a gate are provided in the other die, and a clamping face of the die including the resin path is covered with a release film.

10. (Original) The resin molding machine according to claim 1, wherein the molding die is a transfer molding die, and

a runner and a gate is formed between a clamping face of the transfer molding die, which is covered with a release film, and said cavity plate.

11. (Original) The resin molding machine according to claim 1, wherein the molding die is a transfer molding die, whose clamping face including resin paths is covered with a release film, and

said cavity plate has a groove extended from an edge of the cavity hole.

12. (Original) The resin molding machine according to claim 1, wherein the molding die is a compression molding die including a pair of dies,

a work holding section, on which the work is mounted, is provided in one of the dies, an overflow cavity, which communicates to the cavity hole of said cavity plate, is provided in the other die, and

the other die is covered with a release film.

13. (Original) The resin molding machine according to claim 1, wherein the molding die is a compression molding die

a work holding section, on which the work is mounted, is provided in one of the dies, an overflow cavity, which communicates to the cavity hole of said cavity plate, is provided in the other die, which is covered with a release film, and

the resin supplied to the cavity hole of said cavity plate is absorbed into the overflow cavity covered with the release film.

14. (Original) The resin molding machine according to claim 1, wherein the molding die is a compression molding die

a work holding section, on which the work is mounted, is provided in one of the dies, an overflow cavity, which communicates to the cavity hole of said cavity plate, is provided in the other die, which is covered with a release film, and

a groove communicating the cavity hole to the overflow cavity is formed in said cavity plate.

15. (Original) The resin molding machine according to claim 1, wherein a work holding section, on which the substrate of the work is mounted, is provided in the molding die, and

means for adjusting variations of thickness of the substrate is provided to the work holding section.

16. (Cancelled)

17. (New) A resin molding machine for molding a work with resin, comprising:
a press section having a molding die for clamping and molding the work;
a cavity plate having a cavity hole, which defines a shape and thickness of a resin mold section of the work;
means for setting the work in said press section;
means for repeatedly carrying said cavity plate into and out from said press section;
and
means for positioning said cavity plate onto the molding die,
wherein said cavity plate is a metal belt, which is circulated or reciprocally moved on a clamping face of the molding die.

18. (New) A resin molding machine for molding a work with resin, comprising:
a press section having a molding die for clamping and molding the work;
a cavity plate having a cavity hole, which defines a shape and thickness of a resin mold section of the work;
means for setting the work in said press section;

means for repeatedly carrying said cavity plate into and out from said press section;

and

means for positioning said cavity plate onto the molding die,

wherein said cavity plate is wound on a couple of rollers, and

said cavity plate is separated away from a clamping face of the molding die and

conveyed between the rollers with a prescribed pitch after the work is molded.